

# PVM-14M2MDU/20M2MDU

## Medical Color Video Monitors



Sony  
Medical  
Systems

Designed specifically for use in medical applications, the M2MD Series Monitors provide the exceptional clarity and color fidelity required for endoscopy, ultrasound, surgical and laboratory microscopy. These medical monitors are UL 2601-1 listed, and offer an HR (High Resolution) Trinitron® picture tube, in addition to compatibility with NTSC and PAL color systems. The design, incorporating knob controls, splash guards and on-screen menus, provides flexibility and easier access to monitor setup.



### Features

- ◆ High Resolution Trinitron picture tube
- ◆ On-screen menu in five languages
- ◆ Knob controls of Brightness, Contrast, Aperture, Phase, Chroma and Volume
- ◆ IzzitOn® System provides visual recording confirmation
- ◆ RGB Split Screen (two RGB inputs)
- ◆ Analog RGB, Y/C and composite video
- ◆ Auxiliary 8 volt DC output
- ◆ Improved contrast CRT
- ◆ Improved frequency response
- ◆ Splash-proof panels protect against liquids
- ◆ Front Panel Cover prevents inadvertent operation
- ◆ RS-232C control
- ◆ Automatic selection of standard color systems: NTSC and PAL
- ◆ UL-2601-1 Listed

# Specifications - PVM-14M2MDU/20M2MDU Medical Color Video Monitors

## VIDEO SIGNAL

**Color System:** NTSC, PAL  
**Aperture correction:** 0db to  $\pm 6.0$ db  
**Frequency response:** LINE 10.0 Mhz (-3 dB)  
 RGB 10.0 Mhz (-3 dB) (equivalent to 800 TV Lines)  
**Synchronization:** AFC time constant 1.0 msec.

## PICTURE PERFORMANCE

**Overscan:** 20% overscan of CRT effective screen area  
**Normal scan:** 7% overscan of CRT effective screen area  
**Underscan:** 5% underscan of CRT effective screen area  
**Picture Tube Resolution:** 600 TV lines at center  
**CRT:** P-22 phosphor  
**Color temperature:** 6,500K/9,300K./USER (3200K-10000K, factory setting is 6500K)  
**Maximum Diagonal Viewable Area:** PVM-14M2MDU - 13"  
 PVM-20M2MDU - 19"

## INPUTS

**Y/C IN:** 4-pin mini DIN connector  
**VIDEO IN:** BNC connector  
 1V p-p  $\pm 6$ dB, sync negative  
**AUDIO IN:** phonojack, -5dBu, more than 47kohms  
**R/R-Y, G/Y, B/B-Y IN:** BNC connector  
**R,G,B channels:** 0.7 V p-p,  $\pm 6$ dB  
**Sync on green:** 0.3 V p-p, negative, 75 ohms terminated  
**R-Y, B-Y channels:** 0.7 V p-p,  $\pm 6$ dB  
**Y-channel:** 0.7 V p-p,  $\pm 6$ dB  
 (Standard color bar signal of 75% chrominance)  
**EXT SYNC IN:** BNC connector  
 Composite sync 4V p-p,  $\pm 6$ dB, negative

## OUTPUTS

**Y/C OUT:** 4-pin mini DIN connector  
**VIDEO OUT:** BNC connector, 75 ohms terminated  
**AUDIO OUT:** phonojack, Output level 0.8W  
**R/R-Y, G/Y, B/B-Y OUT:** BNC connector, 75 ohms terminated  
**EXT SYNC OUT:** BNC connector, 75 ohms terminated

## REMOTE INPUT

**REMOTE:** 8-pin mini-DIN connector  
**RS-232C:** 9-pin D-SUB connector

## GENERAL

**Power consumption:** Approx. 90W PVM-14M2MDU  
 Approx. 115W PVM-20M2MDU  
**Power requirements:** 120V AC, 50/60 Hz  
**Operating temperature:** 0-35° C  
**Storage temperature:** -10 to +40° C

## Humidity:

**Compliance:** UL 2601-1 Listed  
**Dimensions:**

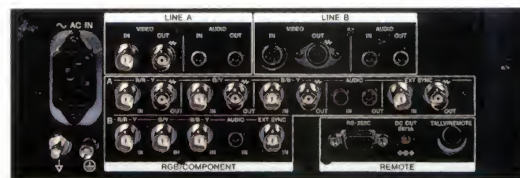
0-90%

PVM-14M2MDU  
 Approx. 346x340x430.5mm (w/h/d)  
 (13 5/8 x 13 1/2 x 16 7/8 inches)  
 PVM-14M2MDU  
 Approx. 450x457.5x503mm (w/h/d)  
 (17 3/4 x 18 1/8 x 19 7/8 inches)  
 not including projecting parts and controls  
 PVM-14M2MDU  
 Approx. 16.7 kg (36 lb 14 oz.)  
 PVM-20M2MDU  
 Approx. 30 kg (66 lb 2 oz.)  
**Warranty:** 3 years parts and labor  
 2 years CRT  
**Supplied Accessories:** AC power cord (1)  
 AC plug holder (1)  
 Splash-proof Panels (2)  
 Front Panel Cover (1)  
 Panel Hinges (2)  
 Remote Control Connector  
 8-pin mini DIN (1)  
 Operating instructions (1)  
 Interface Manual for Programmers (1)  
 IzzitOn System Cable

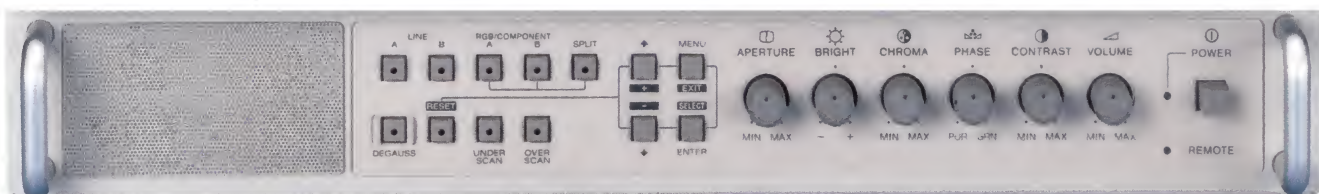
## Optional Accessories:

### Pin Assignment

Pin No.	DIN 8-pin	D-sub 9-pin
1	REMOTE ON/OFF	-
2	LINE A	TX
3	GND	RX
4	LINE B	-
5	TALLY	GND
6	OVERSCAN	-
7	RGB A	RTS
8	RGB B	CTS
9	-	-



Rear Panel Input/Output Terminals



Front Panel Controls

# SONY®

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